

**GUAM ENVIRONMENTAL PROTECTION AGENCY
AIR AND LAND DIVISION
AIR POLLUTION CONTROL PROGRAM
P.O. Box 22439 GMF
Barrigada, Guam 96921**

TITLE V PERMIT TO OPERATE

Permit Number: FO-003
Issue Date: **FIELD (2) Issue Date**
Expiration Date: **FIELD (3) Expiration Date**

In accordance with the provisions of Title V of the Clean Air Act (CAA) and the Guam Air Pollution Control Standards and Regulations (GAPCSR), Public Law 24-20, 10 Guam Code Annotated (GCA), Chapter 49,

**Guam Power Authority
Dededo Power Generating Facility
Dededo, Guam**

is authorized to operate air emission units and to conduct other air pollutant emitting activities in accordance with the permit conditions listed in this permit. Terms and conditions not otherwise defined in this permit have the meaning assigned to them in the referenced regulations. All terms and conditions of the permit are enforceable by the United States Environmental Protection Agency (USEPA) and citizens under the CAA. The issuance of this permit is based on the plans, specifications, and additional information submitted as part of the application dated May 7, 2004.

If all proposed control measures and/or equipment are not installed and properly operated and maintained, this will be considered a violation of the permit.

Acceptance of this permit constitutes an agreement and acknowledgement that the holder will comply with all the rules and regulations of the Guam Environmental Protection Agency (GEPA) and these permit conditions.

This permit, (a) does not in any manner affect the title of the premises upon which the equipment is located, (b) does not release the permittee from any liability for any loss due to personal injury or property damage caused by, resulting from or arising out of the design, installation, maintenance, or operation of the equipment, and (c) in no manner implies or suggests that GEPA, or its officers, agents, or employees assumes any liability, directly or indirectly, for any loss due to personal injury or property damage caused by, resulting from or arising out of the design, installation, maintenance, or operation of the equipment.

Guam EPA

Title V Federal Operating Permit
Guam Power Authority – Dededo
Permit No. FO-003
Expires: **Insert Date**

This permit is valid for a period of five (5) years and shall expire at midnight on the date specified above unless a timely and complete renewal application has been submitted at least 6 months but not more than 18 months prior to the date of expiration. The permit number cited above should be referenced in future correspondence regarding this facility.

Date

Lorilee T. Crisostomo
Administrator
Guam EPA

Abbreviations and Acronyms

ASTM	American Society for Testing and Materials
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAM	Compliance Assurance Monitoring
CFR	Code of Federal Regulations
CO	Carbon Monoxide
g	grams
GAPCSR	Guam Air Pollution Control Standards and Regulations
GCA	Guam Code Annotated
GEPA	Guam Environmental Protection Agency
H ₂ O	water
hr	hour
HRSG	Heat Recovery Steam Generator
ISO	International Organization for Standardization
K	degrees Kelvin
lb	pound
mm Hg	millimeters mercury
MMBtu	Million British thermal units
MW	Megawatt
NAAQS	National Ambient Air Quality Standard
NO _x	Nitrogen Oxides
NSPS	New Source Performance Standards
O ₂	Oxygen
PM ₁₀	Particulate matter less than 10 microns in diameter
ppmdv	parts per million dry volume
PSD	Prevention of Significant Deterioration
QIP	Quality Improvement Plan
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
USEPA	United States Environmental Protection Agency
VOC	Volatile Organic Compounds

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I. Source Identification

Facility Name:	Guam Power Authority – Dededo Power Generating Facility
Facility Location:	Marine Drive
City:	Dededo
Territory:	Guam
USEPA Region:	9
SIC Code:	4911

Responsible Official:	Joaquin C. Flores, P.E.
Phone Number:	(671) 648-3202

Facility Manager/Contact:	Andriano E. Balajadia
Phone Number:	(671) 648-3204

Person Responsible for Recordkeeping:	Sylvia L. Ipanag
Phone Number:	(671) 648-3217

Description of Process:

Guam Power Authority Dededo facility is a combustion turbine and diesel electric generator power generating plant. The operation of this facility helps alleviate load shedding on the island during outages of other power generating facilities. Sources that have the potential to cause significant emissions of air pollutants primarily result from two 23 megawatt (MW) combustion turbine electric generators, four 2.5 MW diesel engine generators, a 1.2 MW diesel generator, and two 150,000 gallons diesel fuel oil storage tanks. Other insignificant emission sources include two 40,000 gallon fuel oil storage tanks, two 1,700 gallon lube oil storage tanks, four 500 day tanks, two 5,000 gallon transformer storage tanks, a 100 gallon fire pump day tanks, and a 300 gallon black start generator day tank.

II. Facility-wide and Unit Specific Permit Conditions

II.A. Equipment Description

II.A.1 This permit encompasses the following equipment and associated appurtenances that are considered significant sources of emissions. [GAPCSR, Section 1104.12(12)]

Emission Unit ID	Description	Manufacturer	Model	Serial Number
CT-1	23 MW combustion turbine electric generator	General Electric	PG 5371	05620 N.P.
CT-2	23 MW combustion turbine electric generator	General Electric	PG 5361	05528 N.P.
DEG-1	2.5 MW diesel engine generator	General Motors	EMD-20-645-E4	69-G1-1051
DEG-2	2.5 MW diesel engine generator	General Motors	EMD-20-645-E4	69-G1-1104
DEG-3	2.5 MW diesel engine generator	General Motors	EMD-20-645-E4	70-C1-1130
DEG-4	2.5 MW diesel engine generator	General Motors	EMD-20-645-E4	71-F1-1136
BSG	1.2 MW black start diesel generator	Cummins	KTA-0-G1	93513/18
FODT-1	150,000 gallon diesel fuel oil storage tank			
FODT-2	150,000 gallon diesel fuel oil storage tank			

II.A.2 The permittee shall have installed an identification tag or nameplate on each piece of equipment that identifies the model number, serial number, and manufacturer. The identification tag or nameplate shall be permanently attached to the equipment at a conspicuous location. [Section 49107(7)(B) of Chapter 49, Part 2, Division 2, Part 1 of Title 10 of the GCA]

II.B. Emission Limits

II.B.1 Combustion Turbine Generators (Units CT-1 and CT-2)

II.B.1.a For fuel burning equipment with a heat input greater than one (1) million British thermal units per hour (MMBtu/hr) but less than 1,000 MMBtu/hr, the allowable particulate emissions shall be calculated by the permittee

using the following equation [State Implementation Plan (SIP), Section 7.5]:

$$Y = 1.02 X^{-0.231}$$

Where: Y = Allowable particulate emission rate (lb/MMBtu)
 X = Operating rate (MMBtu/hr)

II.B.1.b The permittee shall not discharge or cause the discharge into the atmosphere the following pollutants in excess of the specified limits from each of the combustion turbines (Units CT-1 and CT-2):

Pollutant	Emission Limit
Opacity	10%
Particulate matter less than 10 microns (PM ₁₀)	19.8 pounds per hour (lb/hr)
Carbon monoxide (CO)	25 parts per million dry volume (ppmdv) (full-load)
	170 ppmdv (50% load)
	21.0 lb/hr (full-load)
	86.0 lb/hr (50% load)
Nitrogen oxides (NO _x)	59 ppmdv
	83.0 lb/hr (full-load)
	49.0 lb/hr (50% load)
Volatile organic compounds (VOC) expressed as lb/hr methane	4.0 lb/hr (full-load)
	14.0 lb/hr (50% load)
Sulfur dioxide (SO ₂)	218.0 lb/hr

[GEPA Permit GPA-689, Conditions 4 and 6, Issued October 27, 1997;
 USEPA PSD Permit GU 92-01, Condition IX.E.1, Issued April 16, 1993;
 40 CFR 60.332(a)(1)]

II.B.1.c The NO_x and CO emission limits expressed in units of ppmdv in Condition II.B.1.b of this permit shall be corrected to 15% oxygen.
 [USEPA PSD Permit GU 92-01, Condition IX.E.3, Issued April 16, 1993]

II.B.1.d Compliance with the pound per hour emission limits specified in Condition II.B.1.b of this permit shall be determined using 3-hour rolling averages. [USEPA PSD Permit GU 92-01, Condition IX.E.4, Issued April 16, 1993]

II.B.1.e The combustion turbines (Units CT-1 and CT-2) are exempt from NO_x emission limits in Condition II.B.1.b of this permit when ice fog is deemed a traffic hazard by the permittee. [40 CFR 60.332(f)]

II.B.2 Diesel Engine Generators (Units DEG-1, DEG-2, DEG-3, and DEG-4)

II.B.2.a For fuel burning equipment with a heat input greater than one (1) MMBtu/hr but less than 1,000 MMBtu/hr, the allowable particulate emissions shall be calculated by the permittee using the following equation [State Implementation Plan (SIP), Section 7.5]:

$$Y = 1.02 X^{-0.231}$$

Where: Y = Allowable particulate emission rate (lb/MMBtu)
 X = Operating rate (MMBtu/hr)

II.B.2.b The total emissions from the diesel engine generators (Units DEG-1, DEG-2, DEG-3, and DEG-4) shall not exceed the limits specified in the table below:

Pollutant	Emission Limit
PM ₁₀	32.0 lb/hr
NO _x	320.0 lb/hr
SO ₂	57.6 lb/hr

[GEPA Permit GPA-689, Condition 6, Issued October 27, 1997]

II.B.2.c The permittee shall not cause or permit the continuous emission of visible air pollutants with a density equal to or darker than twenty (20) percent opacity from any emission unit nor the emission of visible air pollutants of a density darker than sixty (60) percent opacity for a period aggregating more than three (3) minutes in any sixty (60) minute period. [GAPCSR, Section 1103.3; SIP, Section 10.1]

II.B.3 Black Start Diesel Generator (Unit BSG)

II.B.3.a For fuel burning equipment with a heat input greater than one (1) MMBtu/hr but less than 1,000 MMBtu/hr, the allowable particulate emissions shall be calculated by the permittee using the following equation [State Implementation Plan (SIP), Section 7.5]:

$$Y = 1.02 X^{-0.231}$$

Where: Y = Allowable particulate emission rate (lb/MMBtu)

X = Operating rate (MMBtu/hr)

II.B.3.b The permittee shall not cause or permit the continuous emission of visible air pollutants with a density equal to or darker than twenty (20) percent opacity from any emission unit nor the emission of visible air pollutants of a density darker than sixty (60) percent opacity for a period aggregating more than three (3) minutes in any sixty (60) minute period. [GAPCSR, Section 1103.3; SIP, Section 10.1]

II.C. Work Practice and Operational Requirements

II.C.1 All equipment, facilities, and systems installed or used to achieve compliance with terms and conditions of this permit shall at all times, including periods of startup, shutdown and malfunction, be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. The permittee shall conduct proper preventative maintenance procedures for the combustion turbines, the diesel engine generators, the black start diesel generator, and the fuel oil storage tank in accordance with the manufacturer's recommendations. [GEPA Permit GPA-689, Condition 15, Issued October 27, 1997; GAPCSR, Section 1104.12(12)]

II.C.2 Adequate control measures approved by GEPA shall be implemented to prevent exceedences of any applicable air quality standards during the operation of the facility. [GAPCSR, Section 1104.12(8)]

II.C.3 The emission limits for the combustion turbines (Units CT-1 and CT-2) in Condition II.B.1 of this permit are based upon 7,760 hours per year of full-load operation and 1,000 hours per year of part-load operation of each combustion turbine.

II.C.3.a Part-load operation of the combustion turbines (Units CT-1 and CT-2) shall not exceed 1,000 hours per calendar year for each combustion turbine.

II.C.3.b "Full-load" operation is defined as 100% maximum rated capacity of a combustion turbine. "Part-load" operation is defined as any operation of a combustion turbine at less than 80% of the rated capacity of the combustion turbine. In addition, "percentage of load" operation means a percentage of rated capacity. (Example: "50% load" means 50% of rated capacity).

II.C.3.c Part-load operation of each combustion turbine (Units CT-1 and CT-2) for more than 1,000 hours in any calendar year shall be considered a violation of the applicable CO emission limitation for that combustion

turbine for each day the combustion turbine is operated at part-load beyond the 1,000 hour limitation.

II.C.3.d Upon written request by the permittee, USEPA may review for revision Conditions II.C.3.a and II.C.3.c of this permit. However, such a written request by the permittee will not relieve the permittee from compliance with these conditions.

[USEPA PSD Permit GU 92-01, Condition IX.B.4, Issued April 16, 1993]

II.C.4 Water injection shall be used to control NO_x emissions from the combustion turbines (Units CT-1 and CT-2). Based on initial performance testing, the water-to-fuel ratio shall be at least 0.63 at 50% load and at least 0.59 at 100% load. The minimum water-to-fuel ratio for loads between 50% and 100% shall be adjusted accordingly, but in no case shall the water-to-fuel ratio be less than 0.59. The water injection system shall be in service and operating at the water-to-fuel ratio determined during compliance testing whenever the combustion turbines are in operation. Failure to operate the water injection system during combustion turbine operation shall be considered a violation of the applicable NO_x emission limitation for that combustion turbine. [GEPA Permit GPA-689, Condition 5, Issued October 27, 1997; USEPA PSD Permit GU 92-01, Conditions IX.B.1, IX.B.3, IX.G.4, and IX.G.5, Issued April 16, 1993]

II.C.5 Only No. 2 fuel oil shall be combusted in the combustion turbines (Units CT-1 and CT-2), the diesel engine generators (Units DEG-1, DEG-2, DEG-3, and DEG-4), and the black start generator (Unit BSG). [USEPA PSD Permit GU 92-01, Condition IX.F.1, Issued April 16, 1993]

II.C.6 Failure to operate the water-to-fuel ratio monitoring system or failure to record water or fuel flow data whenever either of the combustion turbines (Units CT-1 and CT-2) is in operation shall be considered a violation of the applicable NO_x emission limit for that combustion turbine. [USEPA PSD Permit GU 92-01, Condition IX.G.6, Issued April 16, 1993]

II.C.7 The maximum sulfur content by weight of the No. 2 fuel oil used by the combustion turbines (Units CT-1 and CT-2), the diesel engine generators (Units DEG-1, DEG-2, DEG-3, and DEG-4), and the black start generator (Unit BSG) shall not exceed 0.6 percent. The use of fuel oil that contains sulfur in excess of 0.6% by weight shall be considered a violation of the applicable SO₂ emission limit for the units in which this fuel is fired. The fuel analysis data shall be recorded and submitted to GEPA with the monthly report. [GEPA Permit GPA-689, Condition 8, Issued October 27, 1997; USEPA PSD Permit GU 92-01, Conditions IX.F.2 and IX.F.3, Issued April 16, 1993; GAPCSR, Sections 1103.10 and 1104.12(8); 40 CFR 60.333(b)]

- II.C.8 At all times, including periods of startup, shutdown, and malfunction of the combustion turbines (Units CT-1 and CT-2), the permittee shall, to the extent practicable, maintain and operate the combustion turbines and water injection system in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to GEPA. This may include, but is not limited to, monitoring results, review of operating and maintenance procedures, and inspection of the source. [GEPA Permit GPA-689, Condition 10, Issued October 27, 1997]
- II.C.9 The black start generator (Unit BSG) shall only be used during times of island-wide power system failure to provide power for the Dededo facility and to start either of the combustion turbines (Units CT-1 and CT-2). [USEPA PSD Permit GU 92-01, Condition IX.D.1, Issued April 16, 1993]
- II.C.10 The black start generator (Unit BSG) shall not be operated when either of the combustion turbines (Units CT-1 and CT-2) is operating and is providing station power and the black start generator shall not provide power to the island-wide power system. [USEPA PSD Permit GU 92-01, Condition IX.D.2, Issued April 16, 1993]
- II.C.11 To keep the black start generator (Unit BSG) immediately available for use in case of an island-wide power system failure, the unit may be operated for approximately one hour per week. [USEPA PSD Permit GU 92-01, Condition IX.D.3, Issued April 16, 1993]
- II.C.12 Excess emissions (for NO_x and SO₂) shall be defined as any period during which:
- II.C.12.a The water-to-fuel ratio for either of the combustion turbines (Units CT-1 and CT-2) fall below the levels specified in Condition II.C.4 of this permit.
- II.C.12.b The combustion turbines (Units CT-1 and CT-2), the diesel engine generators (Units DEG-1, DEG-2, DEG-3, and DEG-4), or the black start generator (Unit BSG) are operated while firing a shipment of fuel oil containing a sulfur content which exceeds 0.6% by weight.
- [USEPA PSD Permit GU 92-01, Condition IX.I.3, Issued April 16, 1993]
- II.C.13 The permittee shall not cause or permit visible fugitive dust to become airborne without taking reasonable precautions. Examples of reasonable precautions are [GAPCSR, Section 1103.4(a); SIP, Sections 8.1, 8.4, and 8.7]:

- II.C.13.a Use of water or suitable chemicals for control of fugitive dust in the demolition of existing buildings or structures, construction and retrofitting operations, the grading of roads, or the clearing of land;
 - II.C.13.b Application of asphalt, water, or suitable chemicals on roads, material stockpiles, and other surfaces which may allow release of fugitive dust;
 - II.C.13.c Installation of appurtenances that provide an enclosure and ventilation for all crushing, aggregate screening, and conveying of material likely to become airborne;
 - II.C.13.d Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Reasonable containment methods shall be employed during sandblasting, spray painting, or other similar operations;
 - II.C.13.e Covering all moving, open-bodied trucks transporting materials which may release fugitive dust;
 - II.C.13.f Conducting agricultural operations, such as tilling of land and the application of fertilizers, in such manner as to reasonably minimize fugitive dust;
 - II.C.13.g Maintenance and sealing of road-ways and parking lots so as to prevent the exposure of such surfaces to wind, water, or vehicular travel erosion; and
 - II.C.13.h Prompt removal of earth or other materials from paved streets which have been transported there by trucking, earth-moving equipment, erosion, or other means.
- II.C.14 Except for persons engaged in agricultural operations or persons who can demonstrate to the Administrator that the best practical operation or treatment is being implemented, no person shall cause or permit the discharge of visible fugitive dust beyond the property lot line on which the fugitive dust originates. [GAPCSR, Section 1103.4(b); SIP, Section 8.2]
- II.C.15 Any modification to the combustion turbines (Unit CT-1 and CT-2) that increases this source's potential to emit pollutants above the applicable Prevention of Significant Deterioration (PSD) threshold level will require a full PSD review (as per 40 CFR 52.21(r)(4)). This will apply to all criteria pollutants including the PM₁₀. [GEPA Permit GPA-680, Condition 17, Issued October 27, 1997]

II.D. Monitoring and Testing Requirements

- II.D.1 The permittee shall provide sampling and testing facilities at its own expense. The tests shall be conducted at the maximum expected operating capacity of the equipment at this facility and GEPA may monitor the tests. For performance test purposes, sampling ports, platforms and access shall be provided by the permittee on the diesel exhaust systems in accordance with 40 CFR 60.8(e). [GAPCSR, Section 1102.4; SIP, Sections 3.6(a), 3.9, and 4.1]
- II.D.2 At least thirty (30) days prior to performance a test, the permittee shall submit a written performance test plan to GEPA that describes the test date(s), duration, locations, and methods, source operation and other parameters that may affect test results. Such a plan shall conform to USEPA guidelines including quality assurance procedures. A test plan or quality assurance plan that does not have the approval of GEPA shall be grounds to invalidate any test and require a retest. [GAPCSR, Section 1102.4]
- II.D.3 Within sixty (60) days after completion of the performance test, the permittee shall submit to GEPA and USEPA Regional Administrator, the test report which shall include the operating conditions of the equipment at the time of the test, the analyses of the fuel, the summarized test results, comparative results with the permit emissions limits, and other pertinent field and laboratory data. [GAPCSR, Section 1102.4; SIP, Section 4.2]
- II.D.4 Performance tests for the emissions of PM₁₀, NO_x, SO₂, VOC, and CO from the combustion turbines (Units CT-1 and CT-2) and the diesel engine generators (Units DEG-1, DEG-2, DEG-3, and DEG-4) shall be conducted on an annual basis in accordance with the test methods set forth in 40 CFR 60.8 and Appendix A, and the results shall be reported to GEPA. The NO_x emissions shall be determined at each of the load conditions specified in Condition II.D.12 of this permit. The following test methods shall be used:
- II.D.4.a Performance test for the emissions of PM₁₀ shall be conducted using USEPA Methods 1-4 and 5 or 5B. (During PM₁₀ performance testing, opacity observations shall be conducted by a certified visual emissions observer pursuant to requirements contained in 40 CFR 60.11(b) and 40 CFR Part 60, Appendix A, Reference Method 9.)
 - II.D.4.b Performance test for the emissions of NO_x shall be conducted using USEPA Method 20.
 - II.D.4.c Performance test for opacity shall be conducted using USEPA Method 9.
 - II.D.4.d Performance test for the emissions VOCs shall be conducted using USEPA Methods 1-4 and 25A.

II.D.4.e Performance test for the emissions of CO shall be conducted using USEPA Methods 1-4 and 10 or 10B.

II.D.4.f Performance test for the emissions of SO₂ shall be conducted using USEPA Methods 1-4 and 20.

[GEPA Permit GPA-689, Condition 13, Issued October 27, 1997; USEPA PSD Permit GU 92-01, Condition IX.H.7, Issued April 16, 1993; 40 CFR 60.335(a)(1); 40 CFR 60.335(b)]

II.D.5 Any deviations from these conditions, test methods, or procedures may be cause for rejections of the test results unless such deviations are approved by GEPA before the tests are conducted. [GAPCSR, Section 1102.4]

II.D.6 Upon written request and adequate justification by the permittee, GEPA may waive the requirement for a specific annual source test. The waiver request must be submitted at least sixty (60) days prior to the required test and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior test indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous source test. [USEPA PSD Permit GU 92-01, Condition IX.H.2, Issued April 16, 1993; GAPCSR, Section 1102.4]

II.D.7 For performance tests conducted as required by this permit, sampling traverse points are to be selected following Method 20 or Method 1 (non-particulate procedures) and sampled for equal time intervals. The sampling shall be performed with a traversing single-hole probe or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points. [40 CFR 60.335(a)(4)]

II.D.8 Notwithstanding Condition II.D.7 of this permit, the permittee may test at fewer points than are specified in Method 1 or Method 20 if the following conditions are met [40 CFR 60.335(a)(5)]:

II.D.8.a The permittee may perform a stratification test for NO_x and diluent pursuant to the procedures specified in Section 6.5.6.1(a) through (e) of Appendix A to 40 CFR 75.

II.D.8.b Once the stratification sampling is completed, the permittee may use the following alternative sample point selection criteria for the performance test:

II.D.8.b.1.a If each of the individual traverse point NO_x concentrations, normalized to 15 percent oxygen (O₂), is within ±10 percent of the mean normalized concentration for all traverse points, then the permittee may use three (3) points (located either 16.7, 50.0, and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The three (3) points shall be located along the measurement line that exhibited the highest average normalized NO_x concentration during the stratification test; or

II.D.8.b.1.b If each of the individual traverse point NO_x concentrations, normalized to 15 percent O₂, is within ±5 percent of the mean normalized concentration for all traverse points, then the permittee may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid.

II.D.9 For purposes of complying with the New Source Performance Standards (NSPS) NO_x limit in Condition II.B.1 of this permit, the NO_x emission rate shall be computed for each run using the following equation. Notwithstanding this requirement, use of the International Organization for Standardization (ISO) correction equation is optional for: lean premix stationary combustion turbines; units used in association with heat recovery steam generators (HRSG) equipped with duct burners; and units equipped with add-on emission control devices. [40 CFR 60.335(b)(1)]:

$$\text{NO}_x = (\text{NO}_{x,o}) (P_r/P_o)^{0.5} e^{19(H_o - 0.00633)} (288^\circ\text{K}/T_a)^{1.53}$$

where:

NO_x = Emission rate of NO_x at 15 percent O₂ and ISO standard ambient conditions, ppm_{dv}

NO_{x,o} = Mean observed NO_x concentration, ppm_{dv}, at 15% O₂

P_r = Reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, millimeters mercury (mm Hg)

P_o = Observed combustor inlet absolute pressure at test, mm Hg

H_o = Observed humidity of ambient air, grams (g) water (H₂O)/g air

e = Transcendental constant, 2.718

T_a = Ambient temperature, degrees Kelvin (K)

- II.D.10 Instead of using the equation listed in Condition II.D.9 of this permit, manufacturers may develop ambient condition correction factors to adjust the NO_x emission level measured by the performance test as provided in 40 CFR 60.8 to ISO standard day conditions. [40 CFR 60.335(a)(6) and 40 CFR 60.335(c)(1)]
- II.D.11 The permittee shall install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water-to-fuel being fired in the combustion turbines (Units CT-1 and CT-2). The monitoring system shall be in operation whenever either combustion turbine is in operation. These systems shall be maintained to within $\pm 5\%$ and shall be approved by UESPA. Failure to operate the fuel and water monitoring system during the combustion turbine operation shall be considered a violation of the applicable NO_x emission limitation for that combustion turbine. [GEPA Permit GPA-689, Condition 3, Issued October 27, 1997; USEPA PSD Permit GU 92-01, Conditions IX.B.2 and IX.B.3, Issued April 16, 1993; 40 CFR 60.334(a)]
- II.D.12 The 3-run performance test required by 40 CFR 60.8 must be performed within ± 5 percent at 30, 50, 75, and 90-to-100 percent of peak load or at four evenly-spaced load points in the normal operating range of the combustion turbines (Unit CT-1 and CT-2), including the minimum point in the operating range and 90-to-100 percent of peak load, or at the highest achievable load point if 90-to-100 percent of peak load cannot be physically achieved in practice. Notwithstanding these requirements, performance testing is not required for any emergency fuel, as defined in 40 CFR 60.331. [40 CFR 60.335(b)(2)]
- II.D.13 The continuous water-to-fuel ratio monitoring system must be operated concurrently with each USEPA Method 20 or American Society for Testing and Materials (ASTM) D6522-00 run and shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with the applicable NO_x emission limit. [40 CFR 60.335(b)(4)]
- II.D.14 The water-to-fuel ratio shall be monitored to establish acceptable values and ranges. The permittee may supplement the performance test data with engineering analyses, design specifications, manufacturer's recommendations, and other relevant information to define the acceptable parametric ranges more precisely. The permittee shall develop and keep on-site a parameter monitoring plan which explains the procedures used to document proper operation of the NO_x emission controls. The plan shall include the parameter(s) monitored and the acceptable range(s) of the parameter(s), as well as the basis for designating the parameter(s) and acceptable range(s). Any supplemental data such as engineering analyses, design specifications, manufacturer's recommendations, and other relevant information shall be included in the monitoring plan. [40 CFR 60.334(g)]

- II.D.15 The sulfur content of the No. 2 fuel oil to be used in the combustion turbines (Units CT-1 and CT-2) shall be monitored using one of the total sulfur sampling options and the associated sampling frequency described in Sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of Appendix D to 40 CFR 75 (i.e., flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with fuel oil already in the intended storage tank). Failure to determine fuel oil sulfur content or failure to keep records shall be considered a violation of the applicable SO₂ emissions limit for the units in which such fuel oil is fired. [USEPA PSD Permit GU 92-01, Conditions IX.F.4, Issued April 16, 1993; GEPA Permit GPA-689, Condition 9, Issued October 27, 1997; 40 CFR 60.334(i)]
- II.D.16 If the option to sample each delivery of fuel oil has been selected, the permittee shall immediately switch to one of the other oil sampling options (i.e., daily sampling, flow proportional sampling, or sampling from the unit's storage tank) if the sulfur content of a delivery exceeds 0.8 weight percent. The permittee shall continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and shall evaluate excess emissions according to Condition II.F.9.b.1 of this permit. When all of the fuel from the delivery has been burned, the permittee may resume using the as-delivered sampling option. [40 CFR 60.334(j)(2)(ii)]
- II.D.17 The permittee shall determine the fuel sulfur content of the fuel combusted in the combustion turbines (Unit CT-1 and CT-2) using a minimum of three samples collected during the performance test. The fuel samples shall be analyzed for the total sulfur content of the fuel using ASTM D129-00, D2622-98, D4294-02, D1266-98, D5453-00 or D1552-01 (all of which are incorporated by reference). [40 CFR 60.335(b)(10)]
- II.D.18 The fuel sulfur content analysis required by this permit may be performed by the permittee, a service contractor retained by the permittee, the fuel vendor, or any other qualified agency. [40 CFR 60.335(b)(11)]
- II.D.19 The permittee shall conduct weekly monitoring for opacity on the combustion turbines (Units CT-1 and CT-2) and the diesel engine generators (Units DEG-1, DEG-2, DEG-3, and DEG-4) following USEPA Method 22 in order to validate compliance with Conditions II.B.1.b and II.B.2.c of this permit. If a visible emissions inspection conducted following USEPA Method 22 documents opacity, a USEPA Method 9 “Visible Emissions Evaluation” shall be completed within three (3) working days, or during the next scheduled operating period if the unit ceases firing on diesel fuel within the three working day time frame. [GAPCSR, Section 1104.12(7)]
- II.D.20 The permittee shall conduct periodic monitoring for opacity on the black start diesel generator (Unit BSG) following USEPA Method 22 in order to validate

compliance with Conditions II.B.3.a and II.B.3.b of this permit. Visible emissions inspection is required every three months if the unit is operated more than 50 hours per quarter. If a visible emissions inspection conducted following USEPA Method 22 documents opacity, a USEPA Method 9 “Visible Emissions Evaluation” shall be completed within three (3) working days, or during the next scheduled operating period if the unit ceases firing on diesel fuel within the three working day time frame. [GAPCSR, Section 1104.12(7)]

II.E. Recordkeeping Requirements

II.E.1 The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; quarterly excess emission reports; fuel usage and fuel sulfur content records; and all other information required by this permit or by NSPS recorded in a permanent form suitable for inspection and made available to GEPA or their representative upon request. This file shall be retained for at least five (5) years following the date of such measurements, maintenance, reports, and records. [USEPA PSD Permit GU 92-01, Condition IX.I.1, Issued April 16, 1993; GAPCSR, Section 1104.12(7)(H)]

II.E.2 The permittee shall maintain a log of the date and nature of all inspections and maintenance activities performed at the facility [GAPCSR Section 1104.12(12)].

II.E.3 The permittee shall maintain records of fuel deliveries identifying the delivery dates and the type and amount of fuel received and including copies of the supplier’s certificate of analysis showing the sulfur content of the fuel delivered. Fuel consumption records shall be maintained annually for the combustion turbine generators (Unit CT-1 and CT-2), the diesel engine generators (Unit DEG-1, DEG-2, DEG-3, and DEG-4), and black start diesel generator (Unit BSG). [GAPCSR, Section 1102.4(c)]

II.E.4 The permittee shall maintain records of the following for the combustion turbines (Units CT-1 and CT-2), the diesel engine generators (Units DEG-1, DEG-2, DEG-3, and DEG-4) and black start diesel generator (Unit BSG), recorded in a permanent form suitable for inspection [GAPCSR, Section 1104.12(7)]:

II.E.4.a All measurements, including operating load and annual hours of operation

II.E.4.b All monitoring device calibration checks

II.E.4.c Inspections, maintenance, adjustments, and any other repair work

II.E.4.d Performance test results

- II.E.5 The records required in Condition II.E.4 of this permit shall be in a permanent form suitable for inspection and shall be retained for at least five years following the date of measurements, maintenance, reports, and records. As a minimum, these records shall include the date of the measurement or inspection, a short description of the action and/or any such repair work, and a description of the part(s) inspected or repaired. [GAPCSR, Section 1104.12(7)]
- II.E.6 The permittee shall install non-resetting fuel meters to record the amount of No. 2 diesel fuel burned by the diesel engine generators (Units DEG-1, DEG-2, DEG-3, and DEG-4) and the combustion turbines (Units CT-1 and CT-2). [GEPA Permit GPA-689, Condition 7, Issued October 27, 1997; USEPA PSD Permit GU 92-01, Condition IX.G.1, Issued April 16, 1993; GAPCSR, Section 1102.4(c)]
- II.E.7 The permittee shall install water meters to record the amount of water injected into each of the combustion turbines (Units CT-1 and CT-2). The recording system must meet the requirements of Condition II.D.11 of this permit. [USEPA PSD Permit GU 92-01, Condition IX.G.1, Issued April 16, 1993; GAPCSR, Section 1102.4(c)]

II.F. Reporting Requirements

- II.F.1 As required in Section II.L and in conjunction with the requirements of Section of this permit the permittee shall report annually the total tons per year emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due within sixty (60) days following the end of the each calendar year. Upon the written request of the permittee, the deadline for reporting of annual emissions may be extended, if GEPA determines that reasonable justification exists for the extension. [GAPCSR, Section 1104.24(c)]
- II.F.2 The permittee shall report in writing within thirty (30) days the modification, relocation, discontinuance of operation of dismantlement of the emission units identified in Condition II.A.1 of this permit. [GAPCSR, Section 1104.5(a)]
- II.F.3 The permittee shall provide a report to GEPA of the results of all monitoring and recordkeeping required by this permit at least once every six (6) months, starting from the date of issuance of this permit. [GAPCSR, Section 1104.12(7)(I)]
- II.F.4 The permittee shall submit to GEPA monthly summary reports indicating the quantity of fuel combusted in the subject year by the diesel engine generators (Units DEG-1, DEG-2, DEG-3, and DEG-4) and the combustion turbines (Units CT-1 and CT-2). [GEPA Permit GPA-689, Condition 7, Issued October 27, 1997]
- II.F.5 The permittee shall report for the combustion turbines (Units CT-1 and CT-2) the date and time of all instances when the water-to-fuel ratio falls the minimum levels required in Condition II.C.4 of this permit in the monthly report. For these

instances, the permittee shall report all information as specified in 40 CFR 60.7(c). For the purposes of this permit, all times when the water-to-fuel ratio falls below the values specified in this permit will be considered as times when the turbines are operating in violation of the permitted applicable emission limits for NO_x. [GEPA Permit GPA-689, Condition 11, Issued October 27, 1997]

II.F.6 The permittee shall submit a written report of all excess emissions to USEPA (Attn: A-3-3) for every calendar quarter, postmarked within 30 days of the end of that calendar quarter. The report shall include the following information:

II.F.6.a Equations and/or conversion factors used to calculate the water-to-fuel ratio for each of the combustion turbines (Units CT-1 and CT-2).

II.F.6.b The date and time of commencement and completion of each time period of excess emissions.

II.F.6.c Specific identification of each period of excess emissions that occurs during startups, shutdowns, or malfunctions of each of the combustion turbines (Units CT-1 and CT-2) or water injection system. The nature and cause of any malfunction (if known) and the corrective action taken or preventative measures adopted shall be reported.

II.F.6.d The date and time identifying each period during which the continuous monitoring system was inoperative except for calibration checks, and the nature of the system repairs or adjustments.

II.F.6.e The date and time when either of the combustion turbines (Units CT-1 and CT-2), the diesel engine generators (Units DEG-1, DEG-2, DEG-3, and DEG-4), or the black start generator (Unit BSG) are operated firing fuel oil with a sulfur content which exceeds 0.6% by weight.

II.F.6.f The number of hours during the quarter when either of the combustion turbines (Units CT-1 and CT-2) operated at part-load operation as defined in Condition II.C.3.b of this permit.

II.F.6.g The number of hours the black start generator (Unit BSG) operated during the quarter except as provided in Condition II.C.11 of this permit.

II.F.6.h Chemical analysis reports for all fuel oil shipments received for that calendar quarter. The permittee shall also state whether all chemical analyses required by NSPS were performed during the calendar quarter.

II.F.6.i When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report.

II.F.6.j When the combustion turbines (Units CT-1 and CT-2) have not been operated at part-load or the black start generator (Units BSG) has not been operated, such information shall be stated in the report.

[USEPA PSD Permit GU 92-01, Condition IX.I.3, Issued April 16, 1993]

II.F.7 In the event of excess emission or malfunction of the combustion turbines (Units CT-1 and CT-2) or the diesel engine generators (Units DEG-1, DEG-2, DEG-3, and DEG-4), the permittee shall notify GEPA within twenty-four (24) hours by telephone of such events. These events shall be followed with a submission of a written notice to GEPA within two (2) weeks from the date of occurrence. [GEPA Permit GPA-689, Condition 12, Issued October 27, 1997]

II.F.8 Any release of NO_x, SO₂, or PM₁₀ into the atmosphere above the acceptable emission limits of the combustion turbines (Units CT-1 and CT-2) or the diesel engine generators (Units DEG-1, DEG-2, DEG-3, and DEG-4) identified in Conditions II.B.1 and II.B.2 of this permit due to equipment breakdown or malfunction shall be immediately reported to the Administrator of GEPA. [GEPA Permit GPA-689, Condition 14, Issued October 27, 1997]

II.F.9 The permittee shall submit reports for the combustion turbines (Units CT-1 and CT-2) of excess emissions and monitor downtime, in accordance with 40 CFR 60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown, and malfunction. For the purpose of reports required for the combustion turbines (Units CT-1 and CT-2) under 40 CFR 60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined below. [40 CFR 60.334(j)]

II.F.9.a *Excess Emissions of Nitrogen Oxides*

II.F.9.a.1 An excess emission shall be any unit operating hour for which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the acceptable water-to-fuel ratio determined to demonstrate compliance with 40 CFR 60.332, as established during the performance test required in 40 CFR 60.8. Any unit operating hour in which no water is injected into the turbine shall be considered an excess emission.

[40 CFR 60.334(j)(1)(i)(A)]

II.F.9.a.2 A period of monitor downtime shall be any unit operating hour in which water is injected into the turbine, but the essential parametric data needed to determine the water-to-fuel ratio are unavailable or invalid.

[40 CFR 60.334(j)(1)(i)(B)]

- II.F.9.a.3 Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions (temperature, pressure, and humidity), and gas turbine load. The permittee does not have to report ambient conditions if the permittee opts to use the worst case ISO correction factor as specified in 40 CFR 60.334(b)(3)(ii), or if the permittee is not using the ISO correction equation under the provisions of 40 CFR 60.335(b)(1).

[40 CFR 60.334(j)(1)(i)(C)]

II.F.9.b *Excess Emissions of Sulfur Dioxide*

- II.F.9.b.1 For fuel oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 weight percent and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit. [40 CFR 60.334(j)(2)(i)]

- II.F.9.b.2 A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime shall include only unit operating hours, and ends on the date and hour of the next valid sample. [40 CFR 60.334(j)(2)(iii)]

II.F.9.c *Excess Emissions during Periods of Ice Fog.* Each period during which an exemption provided in 40 CFR 60.332(f) is in effect shall be reported in writing to the Administrator quarterly. For each period the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time the air pollution control system was reactivated shall be reported. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. [40 CFR 60.334(j)(3)]

II.F.9.d *Excess Emissions during Periods of Emergency Fuel Use.* Each period during which an exemption provided in 40 CFR 60.332(k) is in effect shall be included in the report required in 40 CFR 60.7(c). For each period, the type, reasons, and duration of the firing of the emergency fuel shall be reported. [40 CFR 60.334(j)(4)]

II.G. NSPS General Provisions

For the combustion turbines (Units CT-1 and CT-2), the permittee shall comply with all applicable requirements in Subpart A of 40 CFR 60. [USEPA PSD Permit GU 92-01, Condition IX.J, Issued April 16, 1993; 40 CFR 60, Subpart A].

II.H. Compliance Assurance Monitoring (CAM)

- II.H.1 The permittee shall control NO_x emissions from the combustion turbines (Unit CT-1 and CT-2) using a water injection system operated in accordance of the requirements in Conditions II.D.11, II.D.13, and II.D.14. The water-to-fuel ratio of the water injection system shall be used as an indicator of the NO_x control efficiency for the combustion turbines (Units CT-1 and CT-2). The water-to-fuel ratio shall be maintained at the level required in Condition II.C.4 of this permit. [40 CFR 64.2(a)]
- II.H.2 The permittee shall conduct the monitoring required in Condition II.H.1 of this permit upon issuance of the permit. [40 CFR 64.7(a)]
- II.H.3 At all times, the permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. [40 CFR 64.7(b)]
- II.H.4 Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all water-to-fuel ratio monitoring on the combustion turbines (Units CT-1 and CT-2) in continuous operation at all times that the unit is operating. Data recorded during monitoring malfunctions, associated reports, and required quality assurance or control activities shall not be used for the purposes of 40 CFR 64, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [40 CFR 64.7(c)]
- II.H.5 An excursion is defined to be a period when the water-to-fuel ratio falls below the required level in Condition II.C.4 of this permit for more than one hour. The continuous water-to-fuel ratio monitoring system is required to be accurate to within ±5%. [40 CFR 64.1]
- II.H.6 Upon detecting an excursion or exceedance, the permittee shall restore operation of the pollutant-specific emission unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as

practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown, or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable. [40 CFR 64.7(d)(1)]

II.H.7 Determination of whether the permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process. [40 CFR 64.7(d)(2)]

II.H.8 Based on the results of a determination made under Condition II.H.7 of this permit, the Administrator of the USEPA or GEPA may require the permittee to develop and implement a quality improvement plan (QIP). The QIP threshold for the combustion turbines (Units CT-1 and CT-2) shall be 10 excursions in a six-month reporting period. [40 CFR 64.8(a)]

II.H.9 If required under Condition II.H.8 of this permit, the permittee shall maintain a written QIP and have it available for inspection. The plan shall initially include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the permittee shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:

II.H.9.a Improved preventative maintenance procedures

II.H.9.b Process operation changes

II.H.9.c Appropriate improvements to control methods

II.H.9.d Other steps appropriate to correct control performance

II.H.9.e More frequent or improved monitoring, in conjunction with one or more of the preceding actions

[40 CFR 64.8(b)]

II.H.10 If a QIP is required under Condition II.H.8 of this permit, the permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the GEPA if the period for completing the improvements contained in the QIP exceeds

180 days from the date on which the need to implement the QIP was determined.
[40 CFR 64.8(c)]

II.H.11 Following the implementation of a QIP, upon any subsequent determination pursuant to Condition II.H.7 of this permit the Administrator of the USEPA or GEPA may require that the permittee make reasonable changes to the QIP if the QIP is found to have:

II.H.11.a Failed to address the cause of the control device performance problems;
or

II.H.11.b Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[40 CFR 64.8(d)]

II.H.12 Implementation of a QIP shall not excuse the permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting, or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the CAA. [40 CFR 64.8(e)]

II.H.13 The permittee shall submit monitoring reports for the water injection system to GEPA in accordance with 40 CFR 70.6(a)(3)(iii). [40 CFR 64.9(a)(1)]

II.H.14 The monitoring reports required pursuant to Condition II.H.13 of this permit shall include, at a minimum, the information required under 40 CFR 70.6(a)(3)(iii) and the following information, as applicable:

II.H.14.a Summary information on the number, duration, and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

II.H.14.b Summary information on the number, duration, and cause (including unknown cause, if applicable) for monitoring downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

II.H.14.c A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

[40 CFR 64.9(a)(2)]

II.H.15 The permittee shall comply with the recordkeeping requirements specified in 40 CFR 70.6(a)(3)(ii). The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written QIP requirements pursuant to 40 CFR 64.8 and any activities undertaken to implement a QIP, and other supporting information required to be maintained under 40 CFR 64 (such as data used to document the adequacy of monitoring or records of monitoring maintenance or corrective actions). [40 CFR 64.9(b)(1)]

II.H.16 Instead of paper records, the permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b)(2)]

II.I. Compliance Schedule

II.I.1 For applicable requirements with which the source is in compliance, the source will continue to comply with such requirements. [GAPCSR, Section 1104.8(b)(2)(A)]

II.I.2 For applicable requirements which become applicable during the permit term, the source shall meet such applicable requirements on a timely basis. [GAPCSR, Section 1104.8(b)(2)(B)]

II.J. Compliance Certifications

II.J.1 The compliance plan and compliance certification submittal requirements shall be in accordance with Sections 1104.8 and 1104.9 of the GAPCSR. The compliance certification shall be submitted to GEPA and the USEPA Regional Administrator once per year, or more frequently as set by any applicable requirement. [GAPCSR, Sections 1104.8 and 1104.9]

II.J.2 During the permit term, the permittee shall submit at least annually to GEPA, a compliance certification pursuant to Section 1104.9 of the GAPCSR. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. [GAPCSR, Section 1104.9]

II.K. General Air Quality Protections

II.K.1 The permittee shall not dispose of combustible material by open burning, or cause, suffer, allow, or permit open burning of combustible material within Guam, except as provided in Sections 1103.11 (b) through (e) of the GAPCSR. [GAPCSR, Section 1103.11; SIP, Section 6.1]

II.K.2 Control of Odors in Ambient Air

II.K.2.a The permittee shall not discharge or cause to be discharged into the atmosphere from any source whatsoever, such quantities of odorous emissions which is injurious to health, or is indecent or offensive to the senses, which affects at the same time an entire community or neighborhood, or any considerable number of persons, so as to unduly interfere with the comfortable enjoyment of life or property of such community, neighborhood or persons. It is a creation of a condition which causes injury to the public welfare. [GAPCSR, Section 1103.12(a); SIP, Section 11.1]

II.K.2.b An odor occurrence shall be deemed a violation when a complaint is received by the Administrator and the Administrator is able to detect the odor. This detection must be verified by the Department of Public Health, Environmental Health Section for a person to be found in violation of subsection (a) of this condition. [GAPCSR, Section 1103.12(b); SIP, Section 11.2]

II.K.2.c The odor of growing vegetation, and chemical fertilizers and insecticides when used properly, or when persons can demonstrate to the Administrator that the best practical operation or treatment is being implemented, shall not be considered objectionable for the purposes of this requirement. [GAPCSR, Section 1103.12(c); SIP, Section 11.3]

II.K.3 The permittee shall comply with the asbestos requirements of 40 CFR 61, Subpart M (as amended and incorporated in Section 1103.13 of the GAPCSR), including requirements for demolition and renovation projects. [GAPCSR, Section 1103.13]

II.L. Annual Emissions Reporting Requirements

II.L.1 The reporting period for the annual emissions, including emissions from the emission units identified in Condition II.A.1 of this permit, shall be from January 1 to December 31 of each calendar year. All reports shall be submitted to GEPA along with the annual fee due. The report shall be mailed to [GAPCSR, Section 1104.24(c)]:

**Administrator
Guam Environmental Protection Agency
Air and Land Division
Air Pollution Control Program
P.O. Box 22439 GMF
Barrigada, Guam 96921**

Guam EPA
Title V Federal Operating Permit
Guam Power Authority – Dededo
Permit No. FO-003
Expires: **Insert Date**

All applicable correspondences and records with this permit submitted to GEPA shall have duplicate copies forwarded to:

Director, Air Division (Attn: AIR-5)
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105

II.L.2 The permittee shall retain the information submitted, including all emissions calculations. These records shall be in a permanent form suitable for inspection, retained for a minimum of five (5) years, and made available to GEPA upon request. [GAPCSR, Section 1104.12(7)(H)]

II.L.3 Any information submitted to GEPA without a request for confidentiality shall be considered public record. [GAPCSR, Section 1102.7]

II.L.4 The permittee may request confidential treatment of specific information by submitting a written request to the Administrator identifying the specific information that is to be accorded confidential treatment. [GAPCSR, Section 1102.7(b)]

II.M. Fee Payment

II.M.1 The permittee shall submit fees in accordance with GAPCSR, Sections 1104.21 through 1104.24. [GAPCSR, Section 1104.12(9)(K)]

II.M.2 The permittee shall complete and submit the Annual Fee Calculation Worksheet, including all emissions calculations, with the required annual fee. The permittee shall make copies for future use. [GAPCSR, Section 1104.24(l)]

II.M.3 Annual fees shall be paid in full: [GAPCSR, Section 1104.24(a)]

II.M.3.a Within sixty (60) days after the end of each calendar year;

II.M.3.b Within thirty (30) days after permanent discontinuance of the air emission source.

II.M.4 The permittee shall be assessed a Six Dollars (\$6.00) per ton per pollutant base rate of the total annual emission. However, the minimum annual fee due shall be Five Hundred Dollars (\$500.00) for each valid permit held during the prior calendar year; or Forty-Two Dollars (\$42.00) per month for any fraction of the year the permit is valid after the last calendar year for which annual fee was paid. [GAPCSR, Section 1104.24(g)]

Guam EPA
Title V Federal Operating Permit
Guam Power Authority – Dededo
Permit No. FO-003
Expires: **Insert Date**

- II.M.5 If any part of the annual fee is not paid within thirty (30) days after the due date, a late penalty of five percent (5%) of the amount due shall at once accrue and be added thereto. Thereafter, on the first day of each calendar month during which part of the annual fee or any prior accrued late payment penalty remains unpaid, an additional late payment penalty of five percent (5%) of the then unpaid balance shall accrue and be added thereto. [GAPCSR, Section 1104.25(b)]
- II.M.6 If any annual fee, including the late payment penalty required by the GAPCSR is not paid in full within thirty (30) days after the due date, the Administrator may terminate or suspend any or all of the owner or operator's air pollution control permit, after affording the opportunity for a hearing in accordance with Section 1104.19 or Section 1102.14 of the GAPCSR. [GAPCSR, Section 1104.25(c)]
- II.M.7 The annual emissions data for which the annual fees are based shall accompany the submittal of any annual fees and submitted on forms furnished by GEPA. [GAPCSR, Section 1104.24(c)]
- II.M.8 Check payments shall be made payable to the Treasurer of Guam along with a notation that the funds be deposited into GEPA's Air Pollution Control Special Fund. [GAPCSR, Section 1104.21(d)]
- II.M.9 The annual fees and emissions data shall be mailed to [GAPCSR, Section 1104.24]:

Administrator
Guam Environmental Protection Agency
Air and Land Division
Air Pollution Control Program
P.O. Box 22439 GMF
Barrigada, Guam 96921

All applicable correspondences and records with this permit submitted to GEPA shall have duplicate copies forwarded to:

Director, Air Division (Attn: AIR-5)
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105

III. Title V Administrative Requirements

III.A. Blanket Compliance Statement

The permittee shall comply with all the terms and conditions of this permit. Any permit noncompliance constitutes a violation of the GAPCSR and, for all federally enforceable terms and conditions, the CAA, and is grounds for enforcement action, permit termination, suspension, reopening, or amendment, or for denial of a permit renewal application. Permit noncompliance shall be subject to the penalties and remedies provided for in Section 49116 of Chapter 49, Part 2, Division 2, Part 1 of Title 10 of the GCA. [GAPCSR, Section 1104.12(9)(A) and 1102.12; SIP, Section 4.4]

III.B. Duty to Provide and Supplement Information

The permittee shall furnish, in a timely manner, any information or record requested in writing by GEPA to determine whether cause exists for terminating, suspending, reopening, or amending the permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to GEPA copies of records required to be kept by the permit. For information claimed confidential, the permittee shall furnish such records to GEPA with a claim of confidentiality. [GAPCSR, Section 1104.12(9)(H)]

III.C. Submissions

Any document (including reports, compliance plans and compliance certifications) required to be submitted by this permit shall be certified by a responsible official. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete in accordance with 1102.3 and shall be mailed or forwarded to the following address [GAPCSR, Sections 1102.3 and 1104.12(9)(L)]:

**Administrator
Guam Environmental Protection Agency
Air and Land Division
Air Pollution Control Program
P.O. Box 22439 GMF
Barrigada, Guam 96921**

All applicable correspondences and records with this permit submitted to GEPA shall have duplicate copies forwarded to:

**Director, Air Division (Attn: AIR-5)
U.S. Environmental Protection Agency
75 Hawthorne Street
San Francisco, CA 94105**

III.D. Severability Clause

If any term or condition of this permit becomes invalid as a result of a challenge to a portion of this permit, the other terms and conditions of this permit shall not be affected and remain valid. [GAPCSR, Section 1104.12(9)(B)]

III.E. Circumvention

The permittee shall not cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate these regulations. This provision does not prohibit recycling, burning as fuel or otherwise further processing material which would violate an emission regulation if released to the atmosphere, so long as the facility in which that material is used does not violate applicable emission regulations. [SIP, Section 17.2]

III.F. Permit Actions

This permit will be revoked if the Agency finds willful or continued violations of the standards and regulations. [GAPCSR, Sections 1104.12(9)(A), 1104.18(a)(4), and 1104.18(b)(3); SIP, Section 3.7(c)]

III.G. Reopening for Cause

This permit may be terminated, suspended, reopened, or amended for cause pursuant to Section 1104.18 of the GAPCSR, after affording the permittee an opportunity for a hearing in accordance with Section 1102.14 or 10 GCA 49111. [GAPCSR, Section 1104.12(9)(D)]

III.H. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege. [GAPCSR, Section 1104.12(9)(E)]

III.I. Inspection and Entry

III.I.1 The permittee shall allow GEPA, the Regional Administrator for the USEPA, and/or an authorized representative, upon presentation of credentials or other documents required by law:

III.I.1.a To enter the premises where a source is located or emission-related activity is conducted, or where records must be kept under the conditions of the permit and inspect at reasonable times all facilities, equipment, practices, operations, or records covered under the terms and conditions of the permit and request copies of records or copy records required by the permit; and

III.I.1.b To sample or monitor at reasonable times substances or parameters to assure compliance with the permit or applicable requirements. [GAPCSR, Section 1104.12(9)(M)]

III.J. Emergency Provisions

III.J.1 In addition to any emergency or upset provision contained in any applicable requirement, the permittee may seek to establish that noncompliance with a technology-based emission limitation under this permit was due to an emergency. To do so, the permittee shall demonstrate to the Administrator the affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that:

III.J.1.a An emergency occurred and the permittee can identify the cause(s) of the emergency;

III.J.1.b The permitted facility was at the time being properly operated;

III.J.1.c During the period of the emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations or other requirements in this permit; and

III.J.1.d The permittee submitted notice of the emergency to the Administrator within two (2) working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the prompt reporting of deviations pursuant to Section 1102.9 of the GAPCSR. [GAPCSR, Sections 1104.17(a) and 1104.1(c)]

III.J.1.e In any enforcement proceeding the permittee attempting to establish the occurrence of an emergency has the burden of proof. [GAPCSR, Section 1104.17(b)]

III.K. Transfer of Ownership or Operation

III.K.1 This permit is not transferable, whether by operation of law or otherwise, either from one location to another or from one piece of equipment to another. [GAPCSR, Section 1104.4(c); SIP Section 3.8]

III.K.2 This permit shall not be transferable, whether by operation of law or otherwise, from person to person without the approval of the Administrator. [GAPCSR, Section 1104.4(d); SIP Section 3.8]

III.K.3 In the event of any changes in control or ownership of facilities to be operated or modified, the resulting modification of this permit shall be made as an administrative amendment pursuant to Section 1104.20 of the GAPCSR. [GAPCSR, Section 1104.20]

III.L. Permit Expiration and Renewal

III.L.1 This permit is issued for a fixed term of five years from the date of issuance.
[GAPCSR, Section 1104.11; SIP Section 3.1(b)(4)]

III.L.2 Application for permit renewal shall be submitted no more than eighteen (18) months prior to the date of permit expiration. Application for permit renewal shall be submitted no later than six (6) months prior to the date of permit expiration. Late applications shall be subject to penalties pursuant to Section 1104.25 of the GAPCSR. [GAPCSR, Section 1104.6(d); SIP Section 3.1(b)(4)]

III.L.3 This permit shall remain valid past the expiration date and the air pollution emission source shall not be in violation for failing to have an air pollution control permit, until the Administrator has issued or denied the renewal of the air pollution control permit, provided [GAPCSR, Section 1104.2(d)]:

III.L.3.a A complete renewal application has been submitted and the owner or operator acts consistently with the permit previously granted, and the application on which it was based, and all plans, specifications, and other information submitted as part of the application; and

III.L.3.b The owner or operator has submitted to the Administrator within the specified deadlines, all requested additional information deemed necessary to evaluate or take final action on the renewal application as described in Section 1104.6 of the GAPCSR.

III.M. Permit Modifications

III.M.1 Applications for modification of this permit are subject to the same requirements as the initial application including all requirements pursuant to Section 1104.6(c) of the GAPCSR. The permittee shall submit a description of the modification, identifying all proposed changes, including any changes to the source operations, work practices, equipment design, source emissions, or any monitoring, record keeping, and reporting procedures. Each change from the permit application for this permit shall be identified on the application for the permit modification. [GAPCSR, Section 1104.6(f)]

III.N. Malfunction

III.N.1 Except for emergencies which result in noncompliance with any technology-based emission limitation in accordance with Section 1104.17 of the GAPCSR, in the event any emission unit, air pollution control equipment, or related equipment breaks down in such a manner as to cause the emission of air pollutants in violation of the GAPCSR, or this permit, the permittee shall immediately notify, within twenty-four (24) hours, GEPA of the failure or breakdown, unless the

protection of personnel or public health or safety demands immediate attention to the failure or breakdown and makes such notification infeasible. In the latter case, the notice shall be provided as soon as practicable. The submittal of these notices shall not be a defense to an enforcement action. Within five (5) working days of this initial notification, the permittee shall also submit, in writing, the following information:

III.N.1.a Identification of emission points;

III.N.1.b Magnitude of the excess emissions;

III.N.1.c Time and duration of the excess emissions;

III.N.1.d Identity of the process or control equipment causing the excess emissions;

III.N.1.e Cause and nature of the excess emissions;

III.N.1.f Description of the steps taken to remedy the situation, prevent a recurrence, limit the excessive emissions, and assure that the breakdown does not interfere with the attainment and maintenance of the National Ambient Air Quality Standards (NAAQS) and Guam ambient air quality standards;

III.N.1.g Documentation that the equipment or process was at all times maintained and operated in a manner consistent with good practice for minimizing emissions; and

III.N.1.h A statement that the excess emissions are not part of a recurring pattern indicative of inadequate design, operation, or maintenance. [GAPCSR, Section 1102.9]

III.O. Agency Notifications

III.O.1 The permittee shall notify the Administrator in writing of the following dates:

III.O.1.a The anticipated date of initial start-up for each emission unit of a new source or significant modification not more than sixty (60) days or less than thirty (30) days prior to such date.

III.O.1.b The actual date of construction commencement within fifteen (15) days after such date.

III.O.1.c The actual date of start-up within fifteen (15) days after such date. [GAPCSR, Section 1104.12(9)(G)]

III.O.2 The permittee shall notify GEPA in writing, of the intent to shut down air pollution control equipment for necessary scheduled maintenance at least twenty-four (24) hours prior to the planned shutdown. The submittal of this notice shall not be a defense to an enforcement action. The notice shall include the following:

III.O.2.a Identification of the specific equipment to be taken out of service, as well as its location and permit number;

III.O.2.b The expected length of time that the air pollution control equipment will be out of service;

III.O.2.c The nature and quantity of emissions of air pollutants likely to be emitted during the shutdown period;

III.O.2.d Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period; and

III.O.2.e The reasons why it would be impossible or impractical to shut down the source operation during the maintenance period. [GAPCSR, Section 1102.8; SIP, Section 4.3]

III.O.3 A copy of applicable correspondence or records submitted to GEPA shall be provided to the USEPA pursuant to Section 1104.15 of the GAPCSR. [GAPCSR, Section 1104.12(9)(I)]

III.O.4 Within thirty (30) days of permanent discontinuance of the operation, modification, relocation, or construction of any of the above units, the responsible official shall report the discontinuance in writing to the Administrator. [GAPCSR, Section 1104.5(a)]

III.P. Miscellaneous Conditions

III.P.1 Unless specifically identified, the terms and conditions contained in this permit are consistent with the applicable requirement on which each term or condition is based. [Section 49107(7)(c)(2) of Chapter 49, Part 2, Division 2, Part 1 of Title 10 of the GCA]

III.P.2 This permit, or a copy thereof, shall be maintained at or near the source for which this permit was issued and shall be made available for inspection upon request. [GAPCSR, Section 1104.4(a); SIP, Section 3.12]

III.P.3 This permit shall not be willfully defaced, altered, forged, counterfeited, or falsified. [GAPCSR, Section 1104.4(b); SIP, Section 3.13]

- III.P.4 The facility covered by this permit shall be constructed and operated in accordance with the application, and any information submitted as part of the application, for this permit. There shall be no deviation from this permit condition unless additional or revised plans are submitted to and approved by GEPA, and the permit is amended to allow for such deviation. [GAPCSR, Section 1104.12(12)]
- III.P.5 This permit (a) does not release the permittee from compliance with other applicable statutes of Guam, or with applicable local or federal laws, regulations, or ordinances, and (b) shall not constitute, nor be construed to be an approval of the design of the source. [GAPCSR, Sections 1104.2(e) and 1104.12(11)]
- III.P.6 The permittee shall not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the terms and conditions of this permit. [GAPCSR, Section 1104.12(9)(C)]
- III.P.7 The filing of a request by the permittee for a permit termination, suspension, reopening, or amendment, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [GAPCSR, Section 1104.12(9)(D)]
- III.P.8 This permit shall become invalid with respect to any authorized construction if construction is not commenced as follows:
- III.P.8.a Within thirty (30) days of permanent discontinuance of the construction, modification, relocation or operation of any permitted air pollution emission source, the responsible official shall report the discontinuance in writing to the Administrator.
- III.P.8.b For phased construction projects, each phase shall commence construction within eighteen (18) months of the projected and approved commencement dates in the permit. [GAPCSR, Sections 1104.5(b), 1104.5(c), and 1104.12(9)(F)]
- III.P.9 GEPA may extend the time periods specified in Condition III.P.8 of this permit upon a satisfactory showing that an extension is justified. Request for an extension shall be submitted in writing to GEPA. [GAPCSR, Section 1104.5(d)]
- III.P.10 The permittee may request confidential treatment of any records in accordance with Section 1102.7 of the GAPCSR. [GAPCSR, Section 1104.12(9)(J)]
- III.P.11 The terms and conditions included in this permit, including any provision designed to limit a source's potential to emit, are federally enforceable unless such terms, conditions, or requirements are specifically designated as not federally enforceable. [GAPCSR, Section 1104.14]